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EYE BANK ASSOCIATION of AMERICA

Dedicated to the Restoration of Sight since 1961

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March 26, 1993

MEMO

TO: EBAA Members

FROM: EBAA Office

RE: 1992 Eye Banking Statistics

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Enclosed is the Eye Banking Statistical Report for 1992. Please note the following factors which must be cited to ensure statistical validation from one year to the next.

The 1992 report includes figures from six new sources:

	Total Donations	Total Corneal Grafts
♦Las Vegas, NV	323	188
♦Maywood, IL	50	2
♦San Jose, CA	104	80
♦San Francisco, CA (University of California)	98	37
♦Australia	1198	614
♦New Brunswick	76	51

Please note that previous figures received from the Roanoke, Virginia eye bank are now being reported by the Richmond, Virginia eye bank and figures from the Corpus Christi, Texas eye bank are now included with the Houston, Texas eye bank figures.

The EBAA is grateful to Thomas Lindquist, MD, PH.D., for providing a summary based on statistics received for medical indications for corneal transplant. We do encourage all ophthalmologists who perform corneal surgery to supply their source eye bank with surgical indications so that our report can be as accurate and useful as possible.

EYE BANK ASSOCIATION of AMERICA

EYE BANKING STATISTICS

112 eye banks reporting

Donations

	1990	1991	1992	1992-1990	1992-1991
Whole Eyes	57,250	58,170	59,557	+2,307	+1,387
Corneal Only	28,826	31,807	32,699	+3,873	+ 892
All Donations	86,076	89,977	92,256	+6,180	+2,279

Uses

	1990	1991	1992	1992-1990	1992-1991
Corneal Grafts	40,631	41,393	42,377	+ 1,746	+ 984
Epikeratophakia	2,840	2,010	1,890	- 950	- 120
Research/Training (*Research Only)	38,364	40,239	*34,993	N/A	N/A
Not Used For Medical/Safety Purposes	3,669	5,219	7,294	+3,625	+2,075

Sources of Donation

Whole Eyes	1990	1991	1992
Hospital	50,448	51,657	54,432
Medical Examiner	1,007	1,370	1,010
Other Sources	1,216	4,183	4,115

Corneas	1990	1991	1992
Hospital	13,474	15,977	18,319
Medical Examiner	14,520	14,059	13,691
Other Sources	462	1,050	689

OPO/Tissue Bank Referral-- 7,721
(Number of eye banks reporting - 53)

1992 EYE BANKING STATISTICS

Exported Tissue

USA	10,106
Canada	44
Central/South America	1,948
Africa	182
Europe	513
Asia	1,015

# of eye banks reporting:99

Gratis Tissue

USA	1,905
Canada	1,256
Central/South America	2,753
Africa	161
Europe	70
Asia	396

# of eye banks reporting:86

DONOR PROFILE INFO

Age

Under one	424
Age 1 - 10	673
Age 11 - 20	2,304
Age 21 - 40	6,088
Age 41 - 60	10,468
Age 61 - 70	10,369
Over 70	14,188

# of eye banks reporting: 107

Nationality

Caucasian	30,617
Afro American	1,588
Hispanic	2,417
Oriental	128
American Indian	69

# of eye banks reporting: 93

Cause of Death:

Heart Disease	13,919
Cancer	5,444
Cerebral Vascular Accident	3,023
Motor Vehicle Accident	2,831
Gunshot	2,130
Drowning	224
Stabbing	160
Asphyxiation	289

# of eye banks reporting: 99

Of trauma cases how many were:

Accidental	2,840
Homicide	825
Suicide	1,266

# of eye banks reporting: 100

How many corneas were discarded as a result of a positive test for:

HIV	238
Hepatitis B	984
Hepatitis C	1,495
Syphilis	449
Questionable Donor History	1,054

# of eye banks reporting: 102

1992 Statistical Information

		Yes	No	Some-times
1.	Is tissue typing performed for all donors (# of eye banks reporting: 109)	1	88	20
2.	Do you supply tissue for scheduled surgery (# of eye banks reporting: 110)	67	22	21
3.	Do you culture eye tissue before distribution (# of eye banks reporting: 110)	23	84	3
4.	Do you have a Medical Examiner's law (# of eye banks reporting: 110)	63	47	N/A
5.	If Yes, Do you obtain consent before proceeding (# of eye banks reporting: 64)	40	17	7
6.	Is specular microscopy done for all preserved corneas (# of eye banks reporting: 110)	58	40	12
7.	Do you have funeral directors procuring tissue (# of eye banks reporting: 109)	51	48	10

8.	How many people were on a waiting list as of Dec. 31, 1992 (# of eye banks reporting: 100)	5410
9.	National average processing fee for surgical corneas (# of eye banks reporting: 104)	$916.00
10.	National average processing fee for whole sclera (# of eye banks reporting: 92)	$231.00
11.	National average processing fee for half sclera (# of eye banks reporting: 51)	$191.00
12.	National average processing fee for quarter sclera (# of eye banks reporting: 46)	$151.00
13.	National average processing for research tissue (# of eye banks reporting: 57)	$ 71.00
14.	Primary storage media used (# of eye banks reporting: 112)	Optisol
	What other storage media is used by your Eye Bank (# of eye banks reporting: 62)	MK
15.	Primary method used to preserve sclera (# of eye banks reporting: 103)	Alcohol

Medical Indications for Corneal Transplantation

Medical indications for corneal transplantation performed in the United States in 1992 are reflected in the table below. Ninety-eight eye banks contributed data to the EBAA which is a substantial improvement from the eighty-two eye banks reporting in 1991. The reported 27,332 penetrating keratoplasties with the appropriate indications represent 64% of the total number (42,377) performed in the United States. Bullous keratopathy following cataract extraction (PBK & ABK) continues to be the predominant indication for penetrating keratoplasty. Fuch's endothelial dystrophy eclipsed keratoconus as an indication for penetrating keratoplasty which represents a change from past years.

The EBAA greatly encourages data collection which can be used to reflect trends and direct further research. Unfortunately, eye banks which reported indications for epikeratoplasty and lamellar keratoplasty represent only a small fraction of those within the EBAA. The EBAA would greatly encourage reporting of indications for epikeratoplasty and lamellar keratoplasty in addition to penetrating keratoplasty for 1993.

	1991		1992	
Pseudophakic Bullous Keratopathy	5,028	(25%)	6,298	(23.0%)
Aphakic Bullous Keratopathy	1,710	(9%)	2,162	(8.0%)
Fuchs' Endothelial Dystrophy	2,221	(11%)	3,824	(14.0%)
Corneal Dystrophy (other than Fuchs')	820	(4%)	1,393	(5.0%)
Keratoconus	2,285	(11%)	3,221	(12.0%)
Congenital Opacities	112	(1%)	184	(0.7%)
Viral/Postviral Keratitis	294	(1%)	341	(1.2%)
Microbial/postmicrobial Keratitis	185	(1%)	176	(0.6%)
Syphilitic/postsyphilitic Keratitis	79	(1%)	133	(0.5%)
Noninfectious Ulcerative Keratitis or Perforation	627	(3%)	925	(3.0%)
Corneal Degenerations	848	(4%)	1,018	(4.0%)
Chemical Injuries	95	(1%)	116	(0.4%)
Trauma	524	(2%)	433	(1.6%)
Regraft Associated with Allograft Rejection	935	(5%)	611	(2.0%)
Regraft Unrelated to Allograft Rejection	483	(2%)	1,268	(5.0%)
Nonspecified or other causes of corneal scarring or edema	3,792	(19%)	5,229	(19.0%)
TOTAL REPORTED:	20,038		27,332	

Number of eye banks reporting in 1991: 82
Number of eye banks reporting in 1992: 98

SUMMARY BY CITY

CITY	ALL DONATIONS	TOTAL CORNEAL GRAFTS	LOCAL GRAFTS	EXPORTED GRAFTS	IMPORTED TISSUE	TOTAL GRATIS	TOTAL RESEARCH
ABILENE, TX	6	6		6	6		
ALBANY, NY	282	157	112	45	33	2	77
ALBUQUERQUE, NM	206	62	51	11	125	3	121
AMARILLO, TX	39	31	29	2	10	2	25
ANN ARBOR, MI	3,811	2,340	2,305	35	363	8	1,115
ATLANTA, GA	1,782	823	803	20		8	992
AUGUSTA, GA	340	65	35	30	71	2	255
AUSTIN, TX	214	120	108	12	1		30
BALTIMORE, MD	2,534	846	274	572	126	13	928
BATON ROUGE, LA	167	103	47	56	19	16	
BETHLEHEM, PA	302	134	126	8	19		48
BIRMINGHAM, AL	2,502	1,504	652	852	6	427	718
BOISE,ID	250	75	31	44	6	5	10
BOSTON, MA	2,468	1,531	1,005	526		44	511
BUFFALO, NY	347	223	167	56	30		40
CANTON, OH	146	115	67	48	43	5	6
CHATTANOOGA, TN	132	56	55	1	19		
CINCINNATI, OH	1,901	512	207	305	4	183	1,092
CLEVELAND, OH	1,098	410	363	47	183	18	271
COLUMBIA, MO	2,116	798	299	499	165	53	1,210
COLUMBUS, OH	1,408	415	356	59	3	2	874
DALLAS, TX	636	411	357	54	36	33	42
DAYTON, OH	670	275	67	208	15	4	390
DENVER, CO	235	80	25	55	2	16	91
DENVER-LIONS, CO	2,291	754	476	278		13	674
EDMONTON, ALBERTA	109	89	87	2	46	2	23

SUMMARY BY CITY

CITY	ALL DONATIONS	TOTAL CORNEAL GRAFTS	LOCAL GRAFTS	EXPORTED GRAFTS	IMPORTED TISSUE	TOTAL GRATIS	TOTAL RESEARCH
EL PASO, TX	170	154	83	71	6	4	2
ERIE, PA	72	41	16	25		5	
FRESNO, CA	242	186	65	121		81	2
FT. MYERS, FL	402	312	312			37	59
FT. WORTH, TX	307	192	116	76		4	282
GAINESVILLE, FL	670	201	135	66	60	13	118
HERSHEY, PA	201	61	48	13	23	2	67
HONOLULU, HI	34	28	25	3	83	3	2
HOUSTON, TX	4,355	2,316	762	1,554		360	1,464
INDIANAPOLIS, IN	208	100	69	31	20	12	38
INDIANAPOLIS-LIONS, IN	743	249	145	104	176	4	52
IOWA CITY, IA	542	331	285	46	31	13	220
JACKSON, MS	164	133	133		88		30
KANSAS CITY, KS	656	220	148	72	31		140
KANSAS CITY, MO	1,070	308	145	163	162	8	696
KNOXVILLE, TN	258	155	146	9	10		42
LACKLAND AFB, TX	8	4		4	27	4	4
LANSING, MI	516	327	123	204	11	69	18
LAS VEGAS, NV	323	188	110	78	40	6	178
LEXINGTON, KY	347	242	180	62	44	5	101
LITTLE ROCK, AR	461	261	207	54	60	37	184
LITTLE ROCK-LIONS, AR	16	8	6	2			8
LOMA LINDA, CA	1,129	794	323	471		12	102
LOS ANGELES-TBI, CA	3,210	1,822	966	856		97	1,378
LOS ANGELES-UCLA, CA	34	21	5	16	14		8
LOUISVILLE, KY	462	236	219	17	16	1	194

SUMMARY BY CITY

CITY	ALL DONATIONS	TOTAL CORNEAL GRAFTS	LOCAL GRAFTS	EXPORTED GRAFTS	IMPORTED TISSUE	TOTAL GRATIS	TOTAL RESEARCH
LUBBOCK, TX	304	142	28	114	49	26	169
MADISON, WI	1,737	558	271	287	4	49	1,202
MANHASSET, NY	260	200	163	37	129	30	2
MAYWOOD, IL	100	2	2		3		88
MEMPHIS, TN	654	254	245	9	12	7	343
MIAMI, FL	2,486	1,660	1,414	246		1,660	570
MILWAUKEE, WI	1,426	227	194	33	13	7	766
MINNEAPOLIS, MN	2,772	727	509	218	59	86	1,683
MISSOULA, MT	509	163	49	114		59	304
NASHVILLE, TN	235	150	144	6	21	2	52
NEW BRITAIN, CT	651	334	317	17			274
NEW BRUNSWICK, CANADA	76	51	37	14		14	2
NEW ORLEANS, LA	342	204	195	9	335	15	59
NEW YORK, NY	891	518	511	7	718	6	189
NEWARK, NJ	199	122	105	17		11	143
NORFOLK, VA	336	202	94	108	157	14	169
NORMAL, IL	174	75	55	20		1	54
OKLAHOMA CITY, OK	352	220	220		105		47
OMAHA, NE	696	314	257	57	14	43	230
ORANGE-LIONS-UCI, CA	130	34	25	9	10	10	55
ORLANDO, FL	1,605	513	246	267		26	669
PHILADELPHIA, PA	1,015	372	365	7	202	2	615
PHOENIX, AZ	3,762	1,535	529	1,006		711	2,006
PITTSBURGH, PA	733	395	368	27	22	2	206
PORTLAND,OR	265	103	75	28	75	4	125
PORTLAND-LIONS, OR	2,155	391	283	108	22	33	1,729

SUMMARY BY CITY

CITY	ALL DONATIONS	TOTAL CORNEAL GRAFTS	LOCAL GRAFTS	EXPORTED GRAFTS	IMPORTED TISSUE	TOTAL GRATIS	TOTAL RESEARCH
RICHMOND, VA	984	483	349	134	50	19	231
ROCHESTER, NY	1,466	340	163	177	73	21	1,076
ROCHESTER-MN	446	79	50	29	20		264
SACRAMENTO, CA	552	309	298	11	200		143
SALT LAKE CITY, UT	576	378	337	41	12	34	119
SAN ANTONIO, TX	534	317	278	39	3	3	167
SAN DIEGO, CA	1,694	737	472	265	50	17	628
SAN FRANCISCO, CA	98	37	37				34
SAN JOSE, CA	104	80	72	8		8	2
SAN JUAN, PR	115	115	115				
SAN RAPHAEL, CA	548	340	311	29	15	23	30
SANTA ANA, CA	953	519	111	408		19	283
SASKATOON,SASKATCHEWAN	93	63	63				2
SEABROOK, MD	894	502	129	373	7		75
SEATTLE, WA	2,852	642	492	150	101	136	1,925
SHREVEPORT, LA	306	150	115	35	35		56
SIOUX FALLS, SD	510	333	98	235	22	55	97
SOUTH CHARLESTON, WV	353	297	147	150	78	4	1
SPRINGFIELD, IL	111	45	33	12		33	
ST. LOUIS, MO	1,728	733	407	326	273	53	631
SYDNEY, AUSTRALIA	1,198	614	614				128
SYRACUSE, NY	360	245	197	48			
TAMPA, FL	2,740	1,395	521	874		282	1,113
TEMPLE, TX	94	37	20	17		13	42
TOLEDO, OH	154	121	82	39	1	3	2
TORONTO, ONTARIO	2,173	1,162	1,134	28		1,162	30

SUMMARY BY CITY

CITY	ALL DONATIONS	TOTAL CORNEAL GRAFTS	LOCAL GRAFTS	EXPORTED GRAFTS	IMPORTED TISSUE	TOTAL GRATIS	TOTAL RESEARCH
TYLER, TX	25	25	10	15	9	14	
VANCOUVER, B.C.	690	357	352	5	7	5	190
WASHINGTON, D.C.	302	65	8	57			224
WEST COLUMBIA, SC	639	300	201	99	90	2	287
WICHITA, KS	164	120	59	61		9	14
WILMINGTON, DE	337	127	63	64	23		91
WINNIPEG, MANITOBA	253	68	67	1	3	68	150
WINSTON-SALEM, NC	1,753	951	791	160	117	104	275
112	92,256	42,377	27,772	14,604	5,372	6,541	34,993